## Instituto Superior de Engenharia de Lisboa

Licenciatura em Engenharia Informática e de Computadores Licenciatura em Engenharia Informática, Redes e Telecomunicações

## **Mobile Device Programming**

Project assignment - part 3, Winter semester of 2021/2022

Delivery deadline: 15th January 2022

In this third and last phase of the course's project, the intent is to add features related to playing chess games. The delivery of the implementation of the requirements described below is carried out through the corresponding tag in the group's GitHub repository. The tag name for this last delivery is "chess\_royale\_final".

The ChessRoyale application will now include features related to playing chess games. Games can either take place between users using the same device (i.e. local mode) or between users using different devices (i.e. distributed mode). Student workgroups can choose which mode the application will support: local or distributed. The implementation of the distributed mode is valued but not mandatory.

The game in distributed mode will work as follows: one of the players creates the game indicating its identifier (i.e. a suggestive name). Then the game enters the enrolment phase, in which the entry of another player is awaited. The game starts once another user joins it. The game ends by checkmate, forfeit or draw. Communication between participants is carried out through the publish/subscribe model supported by the document-based <u>Firestore</u> database.

The remaining details related to the user experience, such as how to forfeit a game or propose a draw, are left to the authors' discretion.

Deadline January 15, 2022

ISEL, December 16, 2021